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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,866	01/10/2002	Randy Wickman	7385-84786	9819
7590	04/06/2004			
Welsh & Katz, Ltd. Jon P. Christensen 22nd Floor 120 South Riverside Plaza Chicago, IL 60606			EXAMINER LEE, JOHN D	
			ART UNIT 2874	PAPER NUMBER
DATE MAILED: 04/06/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,866

Applicant(s)

WICKMAN, RANDY

Examiner

John D. Lee

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

A request for continued examination under 37 CFR § 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR § 1.114 and the fee set forth in 37 CFR § 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR § 1.114 and prosecution in this application has been reopened pursuant to 37 CFR § 1.114. Applicant's submission filed on February 20, 2004, has been entered.

The preliminary amendment filed on February 20, 2004, has been entered. Applicant's arguments regarding the Tanguay, Jr. et al reference (U.S. Patent 5,568,574), considered together with the amendments made to the claims, are persuasive and the rejection based upon Tanguay, Jr. et al is withdrawn. In view of further search, however, and the consequent discovery of a relevant prior art document, the following rejection is now made of record. This action is **not** made final.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

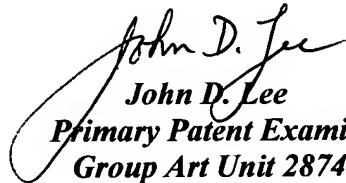
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,469,785 to Duveneck et al (newly cited). See, for example, Figure 5, wherein Duveneck et al discloses an apparatus and method for transmitting optical communications signals using an optical array 312 of a plurality of photo-transmitters 310, 311 or photo-receivers 304, 305 or a combination of the photo-transmitters and the photo-receivers, this array being attached to an underside of an optically transparent

substrate **380** so that the substrate mechanically supports the array and so that a plurality of transmission paths of the array pass directly through the substrate. The mechanical support is seen in that the outermost left and right portions of array **312** are shaped to fit into corresponding recessed portions of substrate **380**. A plurality of “beam control components” **390, 391, 392, 393** are disposed on an opposite upperside of the transparent substrate **380** such that the transmission paths of the array pass substantially therethrough. It is thus clearly seen that Duveneck et al discloses essentially the same apparatus and method being claimed by applicant; the only difference is that the “beam control components” **390, 391, 392, 393** are not specifically disclosed as gratings. They appear in the drawing, however, to be gratings and their functionality is the same as that of gratings (the light signals being diffracted as they pass therethrough). The person of ordinary skill in the art, then, would obviously conclude that “beam control components” **390, 391, 392, 393** are indeed gratings. Considering these components to be gratings, then, a person of ordinary skill would find their method of fabrication on the transparent substrate (mechanically etched, laser scribed, etc.) to be obvious since such a detail would have no bearing on the patented method and apparatus. Regarding applicant’s claimed limitation of an “underfill” between the transparent substrate and the optical array, since the Duveneck et al optically transparent substrate **380** and optical array **312** are mechanically fastened together as explained above, the use of an index matching adhesive (or “underfill”) therebetween would certainly have been obvious to the ordinarily skilled artisan, since the use of such index matching adhesives is commonly practiced in the art in order to minimize coupling losses. The attachment of optical fibers and associated connectors to the various ports of the Duveneck et al Figure 5 embodiment

would also have been obvious, particularly in view of the use of same in other embodiments of the reference (e.g. Figure 6).

Any inquiry concerning the merits of this communication should be directed to Examiner John D. Lee at telephone number (571) 272-2351. The Examiner's normal work schedule is Tuesday through Friday, 6:30 AM to 5:00 PM. Any inquiry of a general or clerical nature (i.e. a request for a missing form or paper, etc.) should be directed to the Technology Center 2800 receptionist at telephone number (571) 272-1562, to the technical support staff supervisor (Team 8) at telephone number (571) 272-1564, or to the Technology Center 2800 Customer Service Office at telephone number (571) 272-1626.


John D. Lee
Primary Patent Examiner
Group Art Unit 2874